

ADOT Statewide Stormwater Permit Application

ADEQ requests that ADOT submit the following information to ADEQ Water Permits Section by March 1, 2005 in electronic format. All information requested in these appendices is to be sent to ADEQ as part of the application. In developing these materials, ADOT is to consider and account for all activities that are likely to occur between March 2005 and March 2010.

Part A: General Information

Arizona Department of Transportation (ADOT) responses to Arizona Department of Environmental Quality (ADEQ) application questions (in black font) are provided in red font throughout the remainder of this document. ADOT documents, policies, and Best Management Practices (BMPs) pertaining to storm water management activities have been developed for a wide range of ADOT functional activities. The ADOT approach to storm water management is summarized in the recently submitted ADOT *Statewide Storm Water Management Plan* (SSWMP). Numerous other documents have also been previously submitted to ADEQ during the consent order compliance process (see Exhibit 1 for a list of ADOT documents). This application references information contained in those documents, where applicable, to avoid duplication. If ADEQ staff should need additional copies of any referenced documents, please contact the State Engineer's Office.

Please provide the following items:

1. ADOT Statewide Stormwater Permit Application Form

A copy of the completed and signed application form is included in Appendix 1 to this Statewide Storm Water Permit Application.

2. A current ADOT Organizational Chart with names and contact information

Current ADOT organization charts are included in the ADOT SSWMP, Chapter II.A, ADOT Organization Roles and Responsibilities for Storm Water Management, Figures 1 and 2. The SSWMP was submitted to ADEQ on February 1, 2005. A list of ADOT key storm water contacts with contact information can be found in Exhibit 1: ADOT Key Storm Water Contacts and ADOT Storm Water Documents List. Early in 2004, ADOT and ADEQ formed a Consent Order Steering Committee and developed protocols for agency contacts regarding consent order issues. ADOT requests that ADEQ continue to work through the same key contacts identified in Exhibit 1 for development of the new individual storm water permit.

3. A GIS-based electronic map showing the following layers:

The following exhibits have been provided in electronic format. Some of these exhibits have been provided to ADEQ in earlier submittals. For ease of reference, they have been included with this application again on one CD, accompanied by one hard copy.

a. Districts

See Exhibit 2(a): State map showing ADOT District boundaries and MS4 locations.

b. Roadways

See Exhibit 3(a): State Highway System with Impaired and Unique Waters.

- c. Urbanized Area boundary from Year 2000 Census
See Exhibits 2(a) and 2(b): State map showing ADOT District boundaries and MS4 locations and MS4s located in the Phoenix Metropolitan Area. ADOT Phase II roadways within the 2000 census urbanized areas are shown in Table 1 in Exhibit 2(a). Maps showing the ADOT Phase II roadways in relationship to the Phase II urbanized area boundaries can be found in Appendix B of the *AZPDES Phase II Permit Application, Proposed Modification of Existing Phase I Permit, MS4 Permit #AZS000018* March 2003.
- d. Waters of the United States using current information available from ADEQ
As of the filing date, ADEQ GIS staff were unable to provide this overlay to ADOT.
- e. Impaired waters using current information available from ADEQ
See Exhibit 3(a): State Highway System with Impaired and Unique Waters and Exhibit 3(b): ADOT Priority Program Unique and Impaired Waters. This overlay uses the 2004 draft 303(d) list as corrected by the Environmental Protection Agency (EPA) to identify projects within 1 mile of unique and impaired waters.
- f. Unique waters using current information available from ADEQ
See Exhibit 3(a): State Highway System with Impaired and Unique Waters and Exhibit 3(b): ADOT Priority Program Unique and Impaired Waters. This overlay uses the 2004 draft 303(d) list as corrected by EPA.
- g. Waters of the United States that have an EPA-approved TMDL
See Exhibit 3(a): State Highway System with Impaired and Unique Waters and Exhibit 3(b): ADOT Priority Program Unique and Impaired Waters. This overlay uses the 2004 draft 303(d) list as corrected by EPA. This exhibit includes not attaining waters that have EPA approved TMDLs.
- h. All maintenance facilities throughout the state
See Exhibit 4: ADOT Facilities Site Locations.
- i. Characteristics of ADOT's MS4 within the Phase I and Phase II Stormwater-regulated communities including:
 - 1. Outfalls to waters of the United States from ADOT structures
 - 2. Permanent structures including conveyance channels, retention basins, detention basins, or other permanent structures that were designed to control water quality or water quantityOutfall and permanent structures maps for the Phase I MS4s can be found in:
 - Exhibits 5(a) through 5(s): ADOT Drainage System and Major Outfalls in Metropolitan Phoenix
 - Exhibits 6(a) through 6(h): ADOT Drainage System and Major Outfalls in Metropolitan TucsonOutfall maps (subject to final engineering review to be completed by July 2005) for the Phase II MS4s can be found in:
 - Exhibit 7: ADOT Drainage System and Major Outfalls in Camp Verde
 - Exhibit 8: ADOT Drainage System and Major Outfalls in Cottonwood
 - Exhibit 9: ADOT Drainage System and Major Outfalls in Douglas
 - Exhibit 10: ADOT Drainage System and Major Outfalls in Flagstaff
 - Exhibit 11: ADOT Drainage System and Major Outfalls in Lake Havasu
 - Exhibit 12: ADOT Drainage System and Major Outfalls in Nogales
 - Exhibit 13: ADOT Drainage System and Major Outfalls in Prescott
 - Exhibit 14: ADOT Drainage System and Major Outfalls in Sedona

- Exhibit 15: ADOT Drainage System and Major Outfalls in Sierra Vista
- Exhibit 16: ADOT Drainage System and Major Outfalls in Yuma

Phase II permanent storm water structures will be added to the Phase II MS4 maps by the end of 2005.

- j. Other locations specified for industrial activities (see page 6)

See Exhibit 4: ADOT Facilities Site Locations. ADOT Material Source Locations will be provided to ADEQ by April 1, 2005.

* For the purpose of all mapping requests, “ADOT’s MS4” refers to any structure designed or used to convey stormwater including structures built, maintained, used, or owned by ADOT.

Part B: Non-Stormwater Discharges

Complete the following tables using the table titles as a guide for the information requested:

Table 1. Include location information for all ADOT facilities (type: maintenance and construction) throughout the state

Facility Name	Facility Type	Facility Site Number	District	Facility Address	Facility's outfall location [downstream latitude/longitude point(s)]	Maintenance Activities PeCoS Program Category for each activity that may cause a non-stormwater discharge
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Exhibit 17 contains the information requested in Table 1. The last column in this table was modified and titled, "Non-Storm Water Discharge Activities Conducted at the Facility" after discussion with ADEQ staff on January 12, 2005 in regard to the limitations of the PeCoS categories.

Table 2. Include discharge-specific information for ADOT's non-stormwater discharges to its MS4 (including conveyances built or maintained by ADOT) **or** to waters of the US

Maintenance Activities PeCoS Program Category for each activity that may cause a non-stormwater discharge	PeCoS Program Category Description	Types of potential non-stormwater discharges from this activity	For each type of non-stormwater discharge, identify the pollutants that would be associated with the discharge	Identify any BMPs that would be used to minimize pollutants in each discharge
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Exhibit 18 contains the information requested in Table 2. To facilitate organization of Table 2, the list of maintenance non-storm water discharges contained in the SSWMP, Chapter III.C.2, was used for the basis of this table. BMPs were developed for each type of non-storm water discharge by the Maintenance Storm Water Advisory Team (SWAT). The Maintenance SWAT is continuing to develop BMPs for all PeCoS and Facilities activities in accordance with the goals stated in the SSWMP.

Part C: Non-Stormwater Discharges

Please provide the following:

1. For any other maintenance activity in which ADOT engages but is not specifically described in ADOT's Performance Control System (PeCoS), describe the type of non-stormwater discharge, the facility(ies) from which this discharge would originate, and the facility's outfall location [downstream latitude/longitude point(s)]

All non-storm water discharges from maintenance activities described in PeCoS and all facility non-storm water discharges have been included in Tables 1 and 2 (Exhibits 17 and 18). Non-storm water discharges associated with construction activities are described in the SSWMP, Chapter III.B.3, Construction. BMPs for construction non-storm water discharges are described in Sections 5.6 and 5.7 of the ADOT *Erosion and Pollution Control Manual*.

2. For discharges known by ADOT to come from 3rd parties into ADOT's MS4 (including conveyances built or maintained by ADOT), provide the following information:
 - a. Types of non-stormwater discharges
 - b. For each type of non-stormwater discharge, identify the discharging party(ies)
 - c. For each non-stormwater discharge, identify the location of the discharge at the point where the third party discharges into ADOT's MS4. Use latitude/longitude and describe the location of the facility. (for example, outfall to Salt River in Mesa at SW corner of the intersection of the 101 and 202 freeways.)
 - d. For each discharge, provide the distance the discharge would have to travel to reach a water of the United States and its typical flow path. Provide the latitude/longitude of the outfall point and describe the location. (for example, irrigation water flows from the intersection of Main and Willow west for 3 miles before discharging at a 3 ft. diameter outfall on the Verde River that is blocked by reeds (32°32'30''/112°44'50''))
 - e. Identify any structural BMPs that are or could be used to control pollutants in each discharge
 - f. Identify any non-structural BMPs that are or could be used to control pollutants in each discharge

ADOT has identified seven outfalls in the Phase I Phoenix Metropolitan Area where dry weather discharges are present. ADOT initiated a program in early 2005 to characterize the discharges from those outfalls (See SSWMP, Chapter III.C.3, MS4s, Table 5 and Exhibit 19: MS4 Dry Weather Discharge Characterization Study-Scope of Work. Watershed boundary maps will be completed for the Phoenix outfalls. Dry weather field screening of the Phoenix outfalls will be conducted in accordance with the methodology set forth in the ADOT *Storm Water Monitoring Guidance Manual for MS4 Activities*. This study was authorized in February 2005 and is expected to be completed by July 2005, when results will be submitted to ADEQ. Information requested in 2a through 2f will be addressed in the study (see Exhibit 19: MS4 Dry Weather Discharge Characterization Study-Scope of Work). No outfalls with dry weather discharges have been identified in the Phase I Tucson Metropolitan Area. Phase II outfall mapping has recently been completed. To date, no Phase II outfalls with dry weather discharges have been located. If such outfalls are located in the future, a dry weather discharge characterization and watershed boundary mapping study, with a scope of work similar to the Phase I outfalls will be initiated.

3. For all non-stormwater discharges listed above, indicate which, if any of these have the potential to result in a discharge to an impaired, unique or perennial water or any water with an EPA-approved TMDL.

ADOT has identified one Phase I outfall with a dry weather discharge that has potential to discharge to an impaired section of the Salt River (See Exhibit 5). This is outfall number 17-198.48. The outfall is located approximately 1 mile from the Salt River.

4. A copy of any current ordinance or policy describing prohibition of non-stormwater discharges to ADOT facilities or from ADOT facilities, including but not limited to:
 - a. A citation for the location of the ordinance
 - b. Authorities to prohibit trash and collect fines associated with highway litter
 - c. Authorities to require a discharger to cease discharge or obtain a permit from ADOT
 - d. Authorities to require a guilty party (the company or person responsible for the discharge) to contract with a waste management company for spill-clean up

A summary of ADOT's legal authority to prohibit non-storm water discharges with accompanying citations is contained in the SSWMP, Chapter I.B, Legal Authority. This section of the SSWMP outlines ADOT's legal authority to control littering and illicit discharges within highway right-of-ways, to require dischargers to obtain encroachment permits, and to enforce against guilty parties. ADOT's encroachment permit regulations have recently been revised and became effective on February 5, 2005. A copy of the new encroachment permit rules is included in Exhibit 20.

5. A description of any current program targeting the control or abatement of non-stormwater discharges to or from ADOT facilities.

ADOT is implementing a dry weather discharge characterization program to target non-storm water discharges in the MS4s (see answer to #2 above). The first phase of this program will address dry weather discharges from ADOT outfalls in the Phase I MS4s. The second phase will identify dry weather discharges in the Phase II MS4s and characterize them in a similar manner.

ADOT has completed development of BMPs to address non-storm water discharges from ADOT maintenance activities (see answers to Part B and Exhibit 18). These BMPs are expected to be adopted and implemented within the ADOT PeCoS program in July 2005 (FY 2006). ADOT has also recently initiated a characterization study of the ports-of-entry scale pit storm water discharges to analyze for any pollutants of concern. Results are expected to be used to determine the scope of an on-site bioremediation pilot project in FY 2007. ADOT has also recently initiated a discharge characterization study of tunnel discharges containing tunnel wash water within the Phoenix MS4. ADOT anticipates results of the tunnel discharge characterization study to be available by July 2005.

Part D: Municipal Discharges Information

Please provide the following:

1. Stormwater Management Program

ADEQ requests that ADOT incorporate both the Large MS4 and Small MS4 Stormwater Management Programs into a new management program designed to control the quality of stormwater runoff from highway structures and maintenance facilities in urbanized areas (as of the year 2000 census) and within the jurisdictions of Sedona, Camp Verde, Cottonwood, Fountain Hills (Flagstaff?), Lake Havasu, Sierra Vista, Nogales and Douglas. ADOT should review state and federal regulations including 40 CFR 122.26(b) and 40 CFR 122.34 and address these requirements as applicable to ADOT's jurisdiction and operating procedures.

As requested, ADOT has incorporated the Phase I and Phase II MS4 programs into one comprehensive MS4 management program (see SSWMP, Chapter III.C.3, MS4s).

2. A wet-weather monitoring program for urbanized areas

Wet weather monitoring has been proposed for the comprehensive MS4 management program and is contained in the *ADOT Storm Water Monitoring Guidance Manual for MS4 Activities*, which was submitted to ADEQ on February 1, 2005.

3. Lab reports and a discussion of any wet-weather data collected during the previous permit term

A summary of wet weather data collected in the Tucson Phase I MS4 is included in Exhibit 21: Wet Weather Data, ADOT Tucson MS4.

4. A description of coordination with any municipalities, including, but not limited to, agreements made with any municipalities concerning the construction, operation or maintenance of any conveyance structures, as well as any groups, committees or other activities in which ADOT currently participates that address stormwater quality within urbanized areas.

A description of ADOT's coordination with municipalities is contained in the SSWMP, Chapter I.C.1 Cooperative Agreements; Chapter IV.B Public Education and Outreach, and IV.C Public Participation and Involvement. ADOT recently became a member of Storm Water Outreach for Regional Municipalities (STORM), a Phoenix-area storm water outreach group consisting of county and municipal representatives. ADOT anticipates future opportunities for outreach activities in the Phase II urbanized areas as the Phase II programs progress in these communities. Additional coordination with municipalities and other groups is conducted on a case-by-case basis on new projects. Agreements between ADOT, municipalities, and other groups are documented in Joint Project Agreements (JPAs) or Inter-governmental Agreements, as necessary.

Part E: Industrial Discharges

Please provide the following:

Material Sources

1. A list of all Material Sources including, but not limited to ADOT Department-furnished facilities, material stockpiles, and inactive sites.

This list should be in tabular format and should include the facility name; address; Material Source# (if applicable); latitude/longitude at lowest elevation(s) where stormwater will leave the property; regulated activities at the site; types of materials stockpiled; SIC code of each activity; the district which is responsible for the project; name of an ADOT contact person, contact email, contact phone number; identification of all named receiving waters; names of impaired, unique or perennial waters or waters with an EPA-approved TMDL that could receive discharge from the project; distance (in stream miles) to each potential receiving water; code to identify the state of the site (ex. active, inactive, temporarily inactive, etc.); list of types of non-stormwater discharges that have the potential to discharge from the facility (including process wastewaters from crushers, recycling, dust control, water bars, vehicle washing or equipment washing).

The ADOT Material Sources Inventory table containing the above-described information, with the exception of the identification of receiving waters, is included in the November 17, 2004 submittal to ADEQ, *Revised ADOT Materials Source Inventory and Reclamation Definition* and in Appendix J of the SSWMP. No material sources were located within ¼ mile of unique, impaired, or not attaining waters. Site-specific receiving waters will be identified as each material source is inspected from 2005 through 2007. The Material Sources inventory table also identifies the ADOT District as the primary contact for each material source. Contact with the Districts should be initiated through the State Engineer's Office (see Exhibit 1). Monitoring guidance for the ADOT material source mining sites is contained in the ADOT manual entitled, *Storm Water Monitoring Guidance Manual for Industrial Activities*. This manual is currently in draft form and is expected to be completed in late spring 2005. Upon completion, a review copy will be submitted to ADEQ.

2. A list of Material Sources that ADOT intends to prioritize for SWPPP development.

Groups IV, V, and VI of the Material Sources Inventory have been designated as high priority sites for potential SWPPP development after site inspections confirm the potential for discharge to waters of the U.S. Group IV are temporarily inactive and inactive sites. Groups V and VI are active sites and are the highest priority. Groups V and VI consist of a total of 45 sites. Site inspections for all groups will be conducted from 2005 through 2007 (see SSWMP, Chapter III.D.2 Material Sources, Goal 1). The following action plan is based on the SSWMP Material Source Goals (Goal 1), with some modifications:

Material Source Inventory and SWPPP Development Action Plan

2005

- Complete development of general BMPs for material source mining sites, review with District personnel

- Continue site inspections
- Begin SWPPP preparation for those sites requiring SWPPPs using a material source mining sites SWPPP template
- Assess and request resource requirements for BMP development and implementation of SWPPP requirements
- Implement requirements of SWPPPs for sites where SWPPPs have been completed, including implementation of BMPs, inspections and employee training for those sites
- During each site inspection, identify areas where mitigation, reclamation, or cleanup is required. Assess and request resource requirements for these activities
- Schedule mitigation, reclamation and/or cleanup activities
- Maintain updated material source (mining sites) inventory, including correcting previous information, and adding or removing sites
- Monitor changes in regulation requirements for program, including changes in designations of waters of the U.S. Adjust material source compliance program as required

2006

- Continue site inspections, preparation of SWPPPs and implementation of SWPPP requirements as in 2005 for each site inspected
- Continue to identify areas needing mitigation, reclamation, and/or cleanup and request resources for these areas
- Continue to schedule mitigation, reclamation and cleanup activities
- Continue to maintain updated material source inventory
- Continue to monitor changes in regulation requirements, and adjust material source compliance program as required

2007

- Complete site inspections
- Complete identification of areas needing mitigation, reclamation and cleanup, and obtaining funding and scheduling for these activities
- The remaining tasks are the same as year 2006

2008

- Implement mitigation, reclamation and cleanup activities in accordance with schedule
- The remaining tasks are the same as year 2007

3. A description of the selection criteria for developing the list in item two, above.

ADOT included selection criteria in the *Revised ADOT Material Source Inventory and Reclamation Definition*, November 17, 2004. ADOT and ADEQ staff later met on November 30, 2004 to discuss the selection criteria and ADEQ staff confirmed the applicability and viability of the selection criteria. Any changes to the Material Sources Inventory will be included in the ADOT Quarterly Reports, with the next report due July 1, 2005.

4. A state map in GIS format showing all industrial facilities listed in item one, above, with labels to indicate the name of the facility.

ADOT has a draft material source GIS overlay in preparation and expects to have a completed location map for submittal to ADEQ by April 1, 2005.

5. A description of ADOT's process for requiring and reviewing mining and reclamation plans from contractors at Department furnished sites.

ADOT has a 3-step process for requiring and reviewing mining and reclamation plans from contractors at Department-furnished sites. This process has been summarized in Exhibit 22(a): ADOT Mining and Reclamation Plan Review Process.

6. A description of ADOT's criteria for reclamation of material sources. Provide contract language, if applicable.

ADOT described these criteria in the *Revised ADOT Material Sources Inventory and Reclamation Definition*, November 17, 2004. At the meeting on November 30, 2004, ADEQ staff requested additional information on military and Bureau of Reclamation contracts for ADOT material sources and on haul road and stockpile sites on Arizona State Land Department (ASLD) trust land (no ADOT material sources are located on ASLD land; however, material source access roads may be permitted on ASLD land). In addition, ADEQ staff members requested a signed copy of the ADOT/Federal Highway Administration (FHWA)/Bureau of Land Management Memorandum of Agreement. Copies of ADOT's agreements with the mentioned agencies can be found in Exhibits 22(b) through 22(e).

7. Copies of ADOT's license agreements with state and federal agencies. ADOT should submit one copy of an example agreement from each land management agency that makes contracts with ADOT for its material sources, including but not limited to, the Forest Service, Army Corps of Engineers, State Land Department and the Bureau of Land Management.

See answer to #6 above. Copies of the FHWA/USDA Forest Service Memorandum of Understanding and *Guidelines for Highways on National Forest Service Land*, ADOT Report No. 31-074, September 1994, are included in the *Revised ADOT Material Sources Inventory and Reclamation Definition*, November 17, 2004 submittal to ADEQ. The latter manual is currently undergoing revision with a first draft scheduled for late spring 2005.

8. A description of any Best Management Practices that ADOT is currently using or intends to use at Material Source sites. The description must clearly associate each management practice with a specific facility.

ADOT is in the process of creating a material source menu of BMPs for use at all ADOT material sources. These BMPs will be used in conjunction with an ADOT material source SWPPP template to develop site specific SWPPPs. The following action plan is summarized from the SSWMP Material Source Goals (Goal 5):

Material Source BMP Development Action Plan

2005

- Complete development of menu of BMPs for mining sites and review with District personnel
- Assess and request resource requirements for BMP development for each site where SWPPP is implemented, and implement the BMPs at that site. Obtain feedback on BMP performance, modify and adopt new BMPs, as necessary. Submit menu of BMPs to ADEQ at the end of 2005

2006

- Assess and request resource requirements for BMP development for each site where SWPPP is implemented, and implement the BMPs at that site
- Obtain feedback on BMP performance, modify and adopt new BMPs, as necessary

2007

- Assess and request resource requirements for BMP development for each site where SWPPP is implemented, and implement the BMPs at that site
- Obtain feedback on BMP performance, modify and adopt new BMPs, as necessary

2008

- Continue described BMP activities for all new sources
- Obtain feedback on BMP performance, modify and adopt new BMPs, as necessary

Non-Material Sources

9. A list of non-Material Source facilities owned, leased or operated by ADOT that are subject to regulation by 40 CFR 122.26(b)(14) [incorporated through A.A.C. R18-9-A905(A)(1)(d)].

This list should be in tabular format and must include the facility name; address; latitude/longitude at lowest elevation(s) where stormwater will leave the property; regulated activities; SIC code of each activity; types of materials stockpiled at the facility; the district which is responsible for the project; name of an ADOT contact person, contact email, contact phone number; identification of all named receiving waters; names of impaired, unique or perennial waters or waters with an EPA-approved TMDL that could receive discharge from the project; code to identify the state of the site (ex. active, inactive, temporarily inactive, etc.); non-stormwater discharges that have the potential to discharge from the facility.

This information is contained in Exhibit 23: ADOT Industrial Facilities Information.

10. Omitted from Application

11. Copies of any Notices of Intent that ADOT has submitted to ADEQ for coverage for industrial facilities under the EPA 2000 Multi-Sector General Permit

Copies of the Notices of Intent for the Grand Canyon Airport, the Durango Traffic Operations Sign Factory, and the Wickenburg Maintenance Yard are included in Exhibit 24, along with a copy of the No Exposure Certification for the ADOT Print Shop.

12. A description of any Best Management Practices that ADOT is currently using or intends to use at any non-Material Source industrial facility. The description must clearly associate each management practice with a specific facility.

See Exhibit 23: ADOT Industrial Facilities Information for a summary description of the industrial facility BMPs. Additional information can be found in the site-specific SWPPPs prepared for these facilities.

13. A description of any definitions or selection criteria that ADOT is using in items one, two, or nine, above, that differ from definitions within 40 CFR 122.26(b)(14).

ADOT is not using any different definitions or selection criteria for items one, two, or nine above, that differ from definitions within 40 CFR 122.26(b)(14).

14. A state map in GIS format showing all industrial facilities listed in item nine, above, with labels to indicate the name of the facility.

See Exhibit 4: ADOT Facilities Site Locations.

Part F: Construction Projects

Please provide the following:

1. Pre-Construction Management Program

ADOT should describe its storm water management planning process for all construction activities. This information should include a description of how storm water management will be considered during the design phase. Pertinent details include the timing of BMP placement in association with various phases of construction, contractor coordination, meetings with local land management agencies, establishing lines of communication for unforeseen discharge events, coordination of clean-up responsibilities, etc. The description should be detailed enough to identify individual steps, approximate timelines and responsible individuals or departments.*

ADOT's storm water management planning process occurs in two distinct phases: Design and Construction. Design activities can be further categorized into: (1) Permanent (Postconstruction) treatment BMP selection and design, and (2) Temporary (Erosion and Sedimentation Control) BMP selection and design. Additional details on the storm water planning activities in these groups can be found in the SSWMP, Chapter III.B.2 and B.3, Design and Construction. Detailed guidance on selection of Temporary (Erosion and Sedimentation Control) BMPs, preparation of SWPPPs, construction phasing, etc. can be found in the *ADOT Erosion and Pollution Control Manual*. Contractor coordination requirements can be found in the *ADOT Standard Specifications for Road and Bridge Construction*, Specification 104.09 (see answer to #2 below).

Permanent (Postconstruction) treatment BMP design guidance can be found in Chapter 600 of the *ADOT Roadway Design Guidelines* (see also SSWMP-Appendix C). These BMPs are in addition to those permanent passive BMPs included in the completed *ADOT Erosion and Pollution Control Manual*. The permanent design guidelines contained in Chapter 600 are directed at management of water quantity rather than water quality. Water quality issues are currently managed on a project case-by-case basis. ADOT is investigating a revision of these guidelines to include a procedure for assessing potential long-term water quality impacts from a proposed project and for the creation of a menu of permanent BMPs that can be selected for such projects early in the design process. To assist ADOT in this process, a consultant will be retained early in 2005. The following action plan is summarized from the SSWMP Design Goals (Goal 1):

Postconstruction (Permanent) BMP Action Plan

2005

- Retain consultant
- Develop a draft project selection methodology for determining which ADOT projects will require long-term water quality management BMPs. Coordinate this process with ADOT Communication and Community Partnerships (CCP) and develop an outreach plan for considering input from local jurisdictions

- Identify and evaluate potentially applicable water quality management BMPs for use in new ADOT projects
- Develop a draft BMP selection procedure

2006

- Circulate project selection methodology, BMPs, and BMP selection procedure for comment
- Revise as necessary and finalize

2007

- Incorporate new design guidelines into ADOT manuals
- Train Design staff on use of the new guidelines

2008

- Incorporate new design guidelines into project designs, where applicable
- Evaluate performance and request feedback internally and externally

Individual steps in project development, approximate timelines and responsible individuals or departments in the design and construction process are documented in the *ADOT Project Development Process Manual*. Courtesy copies of the *ADOT Project Development Process Manual* and the 2000 edition of the *ADOT Standard Specifications for Road and Bridge Construction* are being provided to ADEQ with this submittal. A brief discussion of this process is provided in the SSWMP, Chapter III.B, Project Development and Delivery. A more comprehensive list of the components of each design phase can be found below. In general, the process progresses through the following four stages:

Stage I

The purpose of Stage I is to review the project received from the Scoping phase, finalize the Project Work Plan and submit the required documents. The next three stages are the actual development of the detailed design plan.

Stage II

The purpose of Stage II is to convey the basic design concept and features in accordance with the Scoping phase documents and the Project Work Plan. It is expected that the project plans will be sufficiently developed at this stage to initiate clearance requirements (e.g., that right-of-way requirements can be established).

Stage III

This stage documents that the design is progressing in accordance with the project criteria, existing site conditions, traffic requirements, etc. and that adequate coordination is being provided between the various technical units. Special details are fully developed and included in the plans (final right-of-way plans are completed following Stage III).

Stage IV

In this stage, all construction detail and notes as well as all comments received from previous reviews are resolved and incorporated in the Stage IV documentation, considered the final design. Final = all documents signed, sealed, ready for advertisement.

The next step is to finalize the project (i.e., prepare contract bid documents and advertise for bid).

2. Contract specifications for:

a. standard construction projects

Storm water pollution prevention requirements for standard construction projects are contained in specification 104SWDEQ. Seeding requirements can be found in specification 805 and guidance on erosion control products can be found in specification 810. All of these specifications may be found in Appendix A of the SSWMP. ADOT has been working with a specification team made up of representatives from the Federal Highway Administration (FHWA), the Arizona Associated General Contractors and Tonto National Forest to develop revised storm water specifications during the last year. The final specifications for standard construction projects were sent to FHWA for approval on February 3, 2005 and will be stored (implemented) by ADOT in March 2005.

b. projects that have the potential to discharge to an impaired or unique water or any water with an EPA-approved TMDL

Storm water pollution prevention requirements for unique, impaired, or not attaining waters are contained in specification 104SWDSP, also found in Appendix A of the SSWMP. This specification is written for all sensitive projects and is also currently undergoing revision with anticipated implementation by the end of 2005.

c. determination of final stabilization

ADOT's methodology for determining final stabilization is contained in Appendix A.6 of the ADOT *Erosion and Pollution Control Manual*. Appendix A.6 provides guidance on establishment of 70% vegetative cover. Additional guidance is also provided to the contractor in the 104.09 specifications, which state that the contractor must maintain the seeded areas for a minimum of 45 days before filing the NOT, if the project will be turned over to ADOT prior to establishment of 70% vegetative cover (see SSWMP, Appendix A, 104SWDEQ, Section I)

d. determination of contractor qualifications.

ADOT requires the use of an Erosion Control Coordinator (ECC) on all projects requiring a SWPPP. Qualifications for the ECC are contained in specifications 104.09 SWDEQ and 104.09 SWDSP in the sections titled, "Contractor's Erosion and Pollution Control Coordinator (2) Certification Requirements" (SSWMP, Appendix A). For sensitive projects, ECC certification requirements are enhanced in specification 104.09 SWDSP.

3. A Compliance Oversight Program to be implemented by ADOT at all construction projects including protocols, monitoring frequency, inspection forms and reporting forms, and quality assurance/quality control. This program should be designed with a consideration of current inspection protocols at sites regulated under the Construction General Permit.

ADOT is in the process of implementing a compliance checklist system to be completed by project inspectors at specified frequencies for construction projects requiring a SWPPP. Specifics of this program are contained in the SSWMP, Chapter III, B.3, Construction, Goal 6. A prototype project inspection checklist was developed in 2004 and field verified (see Appendix D, SSWMP). A database and tracking system was also developed in coordination with ADOT Information Management. The prototype checklist will be further refined into several new checklists in 2005 to target project types and locations. The new checklists are 95% complete and will undergo field testing throughout the remainder of 2005. Final adoption of the checklist process is anticipated in early 2007. Results of the compliance assessment will be coordinated with ADOT CCP on an annual basis.

4. A Sensitive Waters Monitoring Program for construction projects that have a potential to discharge to impaired or unique waters or waters with an EPA-approved TMDL including protocols, monitoring frequency, monitoring location, inspection forms and reporting forms, and quality assurance/quality control.*

Throughout 2004, ADOT worked with ADEQ water quality personnel on a draft *Storm Water Monitoring Guidance Manual for Construction Activities* that will provide guidance to both ADOT personnel and contractors for monitoring requirements on projects located within ¼ mile of unique, impaired, or not attaining waters. The Manual was completed in January 2005 and submitted to ADEQ on February 1, 2005.

5. A description of educational opportunities that will be provided by ADOT for ADOT employees and contractors associated with construction activities.

Several storm water training programs were developed and implemented for employees and contractors in 2004. These included Consent Order training, training on ADOT's *Erosion and Pollution Control Manual* (AZPDES), and training on dry wells. Additional details on training can be found in the Consent Order Quarterly Reports. To coordinate future ADOT storm water training, the ADOT ITD Technical Training Section was delegated the responsibility for overseeing an overall framework for storm water training. The SSWMP, Chapter IV.A, Training, contains an outline of the ADOT storm water training program. As each section completes the development of policies and BMPs, targeted training programs will be developed for design, construction (employees and contractors), maintenance, and facilities personnel. It is anticipated that construction training programs will be the first to be developed in 2005. In addition to internal ADOT storm water training, ADOT has been working with the Arizona Associated General Contractors to develop the curriculum for a 2-day ECC certification program (see 2d). This certification program is expected to be operational in late spring 2005 (see SSWMP, Chapter IV.A, Training, Goal 6).

**ADOT should consider not only the new roadway or facility but also any access roads, storage sites, or staging areas from which runoff could discharge to an impaired, unique or*

perennial water or any water with an EPA-approved TMDL either directly OR indirectly (as through a tributary or MS4).

Part G: Definitions

“Construction Project” means any activity subject to regulation under 40 CFR 122.26(b)(14)(xi) or 122.26(b)(15)

“Discharge of a pollutant” means any discharge of any pollutant or combination of pollutants to navigable water from any point source. The term includes the addition of any pollutant from: a treatment works treating domestic sewage; surface runoff that is collected or channeled by man; a discharge through a pipe, sewer or other conveyance owned by a state, municipality, or other person that does not lead to a treatment works and; a discharge through a pipe, sewer or other conveyance, leading to a privately owned treatment works

“Impaired Water” means any segment of any water of the US that is on the current 303(d) list compiled in accordance with the Impaired Waters Rule at A.A.C. R18-11 Article 6.

“Industrial Activity” means any activity subject to regulation under 40 CFR 122.26(b)(14)(i)-(x)

“Intermittent surface water” means a stream or reach of a stream that flows continuously only at certain times of the year, as when it receives water from a spring or from another surface source, such as melting snow.

“MS4” is an abbreviation for municipal separate storm sewer systems and means “a conveyance or system of conveyances (including roads with drainage systems, municipal streets, catch basins, curbs, gutters, ditches, man-made channels or storm drains)

“Named waterbody” is a term to describe “waters of the United States” that are specifically named in A.A.C. R18-11, Appendix B

“Navigable water” is used interchangeably with “waters of the United States” which is defined in 40 CFR 122.2.

“PeCoS” refers to ADOT’s Performance Control System (PeCoS). This table describes ADOT’s maintenance activities, their program description, and prescribes an associated numeric code. ADEQ received a copy of ADOT’s PeCoS table on May 24, 2004.

“Perennial surface water” means a surface water that flows continuously throughout the year.

“TMDL” is an abbreviation for Total Maximum Daily Load. A Total Maximum Daily Load is the maximum amount (load) of a water quality parameter which can be carried by a surface waterbody, on a daily basis, without causing an exceedance of surface water quality standards. TMDL calculations are made for waters listed as impaired on the state's 303(d) List. Every two years, states submit a list of impaired waters and a schedule to establish TMDLs to the EPA. The EPA reviews and approves the 303(d) Lists and schedules. A list of completed TMDLs can be located at ADEQ’s webpage at: <http://azdeq.gov/enviro/water/assessment/status.html>

“Unique water” means a surface water that is classified as an outstanding state resource water by the Director under R18-11-112.

Appendix 1

ADOT Statewide Stormwater Permit Application Form

ADOT Statewide Stormwater Permit Application Form

1. Contact person's name

Doug Forstie

John Nichols

2. Contact person's address

Doug Forstie
Deputy State Engineer
206 S. 17th Avenue
Room 131A, Mail Drop 102A
Phoenix, AZ 85007

John Nichols
Physical Plant Operations Administrator
206 S. 17th Avenue
Mail Drop 178A
Phoenix, AZ 8500

3. Contact person's phone number

Doug Forstie
602.712.8274

John Nichols
602.712.7795

4. Contact person's fax number

Doug Forstie
602.712.8315

John Nichols
602.712.3346

5. Contact person's email address

Doug Forstie
dforstie@azdot.gov

John Nichols
jnichols@azdot.gov

6. Please indicate your preference for communication by circling one of the options below:

- a. I prefer to receive communications on all aspects of this stormwater application directly.
- b. I prefer to have communications on all aspects of this stormwater application sent to the contact person listed above and not routinely sent to me.
- ☒ c. I prefer to have communication sent to both the contact person indicated above and to me.

7. Is the contact person indicated above delegated to represent ADOT on your behalf?

Check one. Yes ☒ No ☐

8. Sign this statement.

I certify that:

- a. *Under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage this system, or those persons direction responsible for gathering the information, I believe the information submitted is true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment.*

Printed Name: Victor Mendez

Title: Director of the Arizona Department of Transportation

Signature:  **Date:** March 1, 2005